



*Id AF*

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

<b>Applicant:</b> Guerst et al.	<b>Examiner:</b> John O. Lacyk
<b>Serial No.:</b> 10/804,391	<b>Group Art Unit:</b> 3735
<b>Filed:</b> March 18, 2004	
<b>For:</b> BLOOD VESSEL HOLDING AND POSITIONING SYSTEM	<b>Docket No.</b> MTI0113/US

Mail Stop Appeal Brief-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

I HEREBY CERTIFY THAT ON October 6, 2008, THIS  
CORRESPONDENCE IS BEING DEPOSITED WITH THE U.S. POSTAL  
SERVICE AS FIRST CLASS MAIL, ADDRESSED TO MAIL STOP  
APPEAL BRIEF-PATENTS, COMMISSIONER FOR PATENTS. P. O.  
BOX 1450, ALEXANDRIA, VA 22313-1450

*Mary C. Deutsch*  
MARY C. DEUTSCH

APPEAL BRIEF

Dear Sir or Madam:

This Appeal Brief is in response to the Notice of Panel Decision from Pre-Appeal Brief Review mailed on September 5, 2008, and in support of a Notice of Appeal and a Pre-Appeal Brief received in the U.S. Patent Office on July 14, 2008, in connection with the above-identified patent application.

Enclosed is a check in the amount of \$540.00 for filing of this Appeal Brief. It is believed that no other fee is required. This Appeal Brief is being filed within one month from the mailing date of the Notice of Panel Decision from Pre-Appeal Brief Review. Therefore, no request for extension is believed to be necessary with this filing. However, if any extension period is required in order for this paper to be timely filed, then Applicants hereby request an extension for such additional time period and authorize the appropriate fee(s) therefore to be charged to the Kagan Binder Deposit Account No. 50-1775 and notify us of the same.

10/09/2008 HGBREW1 00000032 10804391

01 FC:1402

540.00 0P

## Table of Contents

	PAGE
I. Real Party in Interest .....	3
II Related Appeals and Interferences .....	4
III. Status of Claims.....	5
IV. Status of Amendments.....	6
V. Summary of Claimed Subject Matter .....	7
VI. Grounds of Rejection to be Reviewed on Appeal .....	10
VII. Argument.....	11
VIII. Claims on Appeal Appendix .....	20
IX. Evidence Appendix.....	24
X. Related Proceedings Appendix.....	25

**I. Real Party in Interest**

Medtronic, Inc., the assignee of record, is the real party in interest.

## **II. Related Appeals and Interferences**

There are no related appeals or interferences.

### **III. Status of Claims**

Claims 1, 4-10, 13, 15-17 and 24-31 are pending in the above-identified patent application. Claims 2-3, 11-12, and 14 have been canceled. Claims 18-23 and 32-37 are withdrawn. Claims 1, 4-10, 13, 15-17 and 24-31 stand rejected. Claims 1, 4-10, 13, 15-17 and 24-31 are on appeal.

#### **IV. Status of Amendments**

No Amendment has been submitted subsequent to the Final Office Action, dated April 11, 2008.

#### IV. Summary of Claimed Subject Matter

*Note: The parenthetical citations below refer to the Applicants' specification and figures.*

The specifically claimed subject matter of independent claims 1, 10, and 24 is supported and described in the subject application as follows.

1. A device used to hold and position a blood vessel in the performance of a coronary artery bypass graft procedure, comprising:
  - a handle (¶¶0011, 0027, 0039, 0045; Fig. 1);
  - a collar coupled to the handle, the collar adapted to substantially encircle a blood vessel, the collar having a number of suction apertures (¶¶0011, 0027, 0032, 0039, 0043, 0046; Figs. 1, 2);
  - a vacuum port adapted to be coupled to a vacuum source, the vacuum port communicating a suction to the suction apertures to hold the blood vessel (¶¶0011, 0027, 0028, 0032, 0034, 0039, 0043, 0044; Figs. 1, 2); and
  - wherein the collar is comprised of two collar halves that together form a cylinder (¶¶0030, 0036, 0050; Fig. 2); and
  - further comprising a ring for encircling the collar halves to attach the collar halves together (¶¶0031, 0036, 0043; Figs. 1, 2).
  
10. A conduit positioning system for use in the performance of a surgical technique on a patient, comprising:
  - a collar adapted to substantially encircle a conduit in the patient, the collar having a number of suction apertures (¶¶0027, 0032, 0039, 0043, 0046; Figs. 1, 2); wherein the collar is comprised of two collar halves that together form a cylinder with a length (¶¶0030, 0036, 0050; Fig. 2);
  - a vacuum line coupled to the suction apertures, the vacuum line having a length (¶¶0027, 0028, 0030, 0043; Figs. 1, 2);
  - a vacuum source coupled to the vacuum line to create a suction at the suction apertures to hold the conduit (¶¶0028, 0030, 0039, 0044; Figs. 1, 2);

and a handle coupled to the attachment head (¶¶0027, 0039, 0045; Fig. 1); wherein the length of the cylinder is substantially less than the length of the vacuum line (Fig. 1); and further comprising a ring for encircling the collar halves to attach the collar halves together (¶¶0031, 0036, 0043; Figs. 1, 2).

24. A blood vessel positioning device for use in cardiac surgery, comprising: a handle (¶¶0013, 0043, 0044; Fig. 9); and a first collar and a second collar coupled to the handle (¶¶0013, 0043, 0044; Fig. 9), the second collar separated from the first collar by a first distance, each collar adapted to substantially encircle a blood vessel and having a number of suction apertures (¶¶0013, 0043, 0044; Fig. 9), wherein the suction apertures are adapted to engage and hold the blood vessel (¶¶0013, 0044).

The invention relates to an anastomosis device that is designed to hold a graft vessel specifically during the performance of a coronary artery bypass graft procedure, for example, to facilitate the procedure from a mechanical performance standpoint (¶¶0009, 0049). The device minimizes the time necessary to perform the procedure by properly holding and positioning a graft vessel for suturing (¶¶0009, 0049). The device is configured to atraumatically hold a blood vessel or other conduit during the performance of the procedure (¶¶0001, 0049). Particularly, the device holds a graft vessel in such a way that an open end of the graft vessel is presented in a configuration suitable for suturing at an anastomosis site (¶¶0001, 0049). The device is also configured in such a way as to permit the insertion of another surgical instrument through the inside the graft vessel while holding the graft vessel (¶¶0009, 0049).

The device comprises a handle (¶¶0011, 0027, 0039, 0045; Fig. 1), which may be malleable (¶¶0043). A collar is coupled to the handle, with the collar being adapted to substantially encircle a blood vessel graft (¶¶0011, 0027, 0032, 0039, 0043, 0046; Figs. 1, 2). The collar has a plurality of suction apertures that are in communication with a vacuum source in order to apply suction to hold the graft vessel (¶¶0011, 0027, 0028,



0032, 0034, 0039, 0043, 0044; Figs. 1, 2). The vacuum source may be coupled to a vacuum port on the device through a vacuum line (¶¶0011, 0027, 0028, 0032, 0034, 0039, 0043, 0044; Figs. 1, 2). The vacuum line may be incorporated into the handle (¶0028). The suction apertures may be circular (¶0030).

The collar has two collar halves that together form a cylinder with a length in order to surround the graft vessel (¶¶0030, 0036, 0050; Fig. 2). The cylinder may have a length substantially less than the vacuum line (Fig. 1). The collar may be sized to hold an internal mammary artery (¶0033).

A ring encircles and attaches the collar halves together (¶¶0031, 0036, 0043; Figs. 1, 2). The ring may be constructed of a variety of materials sufficient to hold the two collar halves together during use of the device (¶0031). The ring is removed from around the collar in order to remove the device after the graft vessel has been attached to the coronary artery, for example (¶0036). The ring may be cut to allow removal of the ring and the collar from the attached graft (¶0036).

The device may include a second collar separated from the first collar that is also adapted to engage and hold the blood vessel (¶¶0013, 0043, 0044; Fig. 9). The two collars may then hold the vessel during an anastomosis in order to control both sides of the anastomosis site (¶0047). Alternatively, one collar may be used to occlude a blood vessel and the other collar to hold the blood vessel open (¶0047).

With two collars, the handle may then comprise a first prong and a second prong, with the first prong being attached to the first collar and the second prong being attached to the second collar (¶0043). The prongs may be malleable (¶0043). The collars may be sized to encircle an internal mammary artery (¶¶0046, 0047).

The device with the two collars may further comprise a vacuum source coupled to the suction apertures (¶¶0043, 0044, 0045). The device may alternatively further comprise a vacuum coupling the vacuum source to the first and second collars (¶¶0043, 0044, 0045). The vacuum line may be incorporated into the handle of the device (¶¶0043, 0044, 0045). Each collar of the device may have a plurality of suction apertures and the suction apertures may be circular (¶¶0043, 0044, 0045).

## **VI. Grounds of Rejection to be Reviewed on Appeal**

Whether claims 1, 4-10, 13 and 15-17 are patentable under 35 U.S.C. 103(a) over Kimberley et al. (US Pat. 3,361,133) in view of Collito (US Pat. 3,254,650) or Toch (US Pat. 3,916,875).

Whether claims 1, 4-10, 13, 15-17, and 24-31 are patentable under 35 U.S.C. 103(a) over Peternel (US Pat. 3,561,448) in view of Collito or Toch.

## VII. Argument

**Claims 1, 4-10, 13 and 15-17 are patentable under 35 U.S.C. 103(a) over Kimberley et al. (US Pat. 3,361,133, hereinafter “Kimberley et al.”) in view of Collito (US Pat. 3,254,650, hereinafter “Collito”) or Toch (US Pat. 3,916,875, hereinafter “Toch”).**

### *Claims 1 and 10*

Independent claims 1 and 10 are rejected under 35 U.S.C. 103(a) over Kimberley et al. in view of Collito or Toch. The rejection of claims 1 and 10 is legally insufficient. Kimberley et al. teaches away from the combination with either Collito or Toch. There is no motivation for modifying Kimberley et al. in light of Collito or Toch. In particular, the device disclosed in Kimberley et al. teaches away from using a ring such as those disclosed in Collito or Toch. There is no expectation of success when combining the ring of Collito or Toch with the device of Kimberley et al., and making such combinations would destroy the functionality of the Kimberley et al. device. Thus, the Examiner erred in rejecting claims 1 and 10 based upon Kimberley et al. in view of either Collito or Toch.

Claim 1 recites a device to hold and position a blood vessel during a coronary artery bypass graft procedure. Claim 10 recites a conduit positioning system for use in the performance of a surgical technique. Both claims include a feature of a collar used to encircle the vessel or conduit that is comprised of two collar halves that together form a cylinder. The collar has a number of suction apertures. Also, both claims 1 and 10 include the feature of a ring for encircling the two collar halves and for attaching the two collar halves together. Once anastomosis has been created, the device or system is removed from the vessel or conduit by cutting the ring and removing the two halves of the collar from the vessel or conduit (§0040).

The Final Office Action states that Kimberley et al. discloses all the features of the rejected claims “except for specifically using a ring for encircling the collar halves to hold them together during use.” The Final Office Action further states that it would have been obvious in view of either Collito or Toch to have a collar held together using a ring.

Kimberley et al. discloses a device for holding the end of a severed vessel in position for a mechanical connection to be made quickly to an external blood circuit (col. 1, lines 44-48). The device is a vacuum artery clamp including a cylindrical housing that is split into two identical halves 1, 2 (col. 2, lines 6-7). A handle 5 is fixed to each housing half 1, 2 by swingable arms 6, 7 that hold the halves 1, 2 in relative positions (col. 2, lines 11-13, 21-23). The handle 5 and swingable arms 6, 7 combination includes a spring bias that urges the housing halves 1, 2 to a closed position while still allowing the halves 1, 2 to easily assume an open position for loading of a vessel into the device (col. 2, lines 13-21). Therefore, Kimberley et al. does not teach the use of a ring to hold the housing halves 1, 2 together. Such a ring is not necessary because the halves 1, 2 are urged to a closed position by the spring bias.

Collito discloses an anastomosis device comprising a mating pair of connector devices 14, 16 that are associated with separate parts of a body member, e.g., a vessel, and in turn are connected to bring the separate parts of the body member together (col. 2, lines 1-4; col. 3, lines 48-49). The connector devices 14, 16 are assembled *in situ* and affixed to the vessel and to each other end-to-end using an adhesive known as Eastman 910 (col. 3, lines 18-20, 58-62, 64-68). In an alternative embodiment, as shown in FIG. 5, a retainer ring 48 is provided to hold flanges 30, 32 on the separate connector devices 14, 16 together end-to-end as an alternative to using adhesive (col. 4, lines 40-44). However, the retainer ring 48 of Collito does not hold two halves of a cylindrical body together.

Kimberley et al. teaches away from a combination with Collito. The devices of Kimberley et al and Collito have very different configurations. Kimberley et al. includes two semi-cylindrical housing halves 1, 2 that are urged to a closed position by a spring bias, with the halves 1, 2 being easily opened for loading of the device. Collito, on the other hand, joins two cylinders together end-to-end using an adhesive. The retainer ring may be used to join the connector devices 14, 16 together end-to-end. The ring does not hold two halves of a cylinder together. Therefore, one of ordinary skill in the art would not seek to modify Kimberley et al. to add a ring such as in Collito. Kimberley et al. does not join two cylinders end-to-end as in Collito. Also, in Kimberley et al., there is no need for such a ring because a spring bias is used to hold the halves together. A ring

surrounding the two halves in Kimberley et al. would be a hindrance, since an open position of the halves is needed for loading a vessel into the device. An object of the Kimberley et al. device is to allow for anastomosis to be “quickly and readily accomplished,” and having a ring encircling and attaching the halves 1, 2 would be contrary to such an object and would destroy the functionality of the device. Thus, Kimberley et al. and Collito cannot alone or in combination form the basis of an assertion that claims 1 and 10 are obvious.

Toch discloses a device for facilitating lymph duct cannulation (col. 1, lines 6-7) that comprises two identical semicylindrical members 15a, 15b that are assembled together to form a cylinder having an outer shell 16, with a pair of coaxial openings 19 on the ends 16a, 16b (col. 2, line 62 – col. 3, line 5). A lymph duct, as shown in FIG. 3, may extend through the openings 19, with a clamp 20 holding the semicylindrical members 15a, 15b together and in place around the duct (col. 3, lines 2-6). The semi cylindrical members 15a, 15b hold a pliable rubber or plastic membrane 22 in place such that a chamber 23 exists between the shell 16 and the membrane 22 (col. 3, lines 7-11). The chamber 23 is then pressurized or evacuated in order to aid in dilation of the lymph duct being held in the device (col. 3, lines 11-14, 27-33).

Kimberley et al. also teaches away from a combination with Toch. In Toch, the clamp 20 is used to hold two semi-cylindrical components together, which had no other means for being held together. In Kimberley et al., on the other hand, the handle 5 is spring biased to urge the halves 1, 2 together in a closed position, with the arms 5, 6 being capable of being easily manipulated to move halves 1, 2, to an open position. One of ordinary skill in the art would not, therefore, seek to add a clamp component as in Toch to the device described in Kimberley et al., as there would be no need for such a clamp. Such a clamp encircling and attaching the halves 1, 2 would be contrary to the object of the Kimberly et al. device and would destroy the functionality of the device. Also, the Toch device is designed to facilitate lymph duct cannulation, and is not designed to bring two ends of a severed vessel together in order to connect the two ends. The Toch device instead surrounds a lymph duct in order to dilate the duct. Therefore, one of ordinary skill in the art would have no motivation to combine the two references

together. Thus, the Kimberley et al. and Toch references cannot alone or in combination form the basis of an assertion that claims 1 and 10 are obvious.

Therefore, Kimberley et al. teaches away from the combination with either Collito or Toch. There is no motivation to combine the references nor an expectation of success when combining Kimberley et al. with a ring or clamp such as that disclosed in Collito or Toch. Such combinations would actually destroy the functionality of the Kimberley et al. device. Thus, the Examiner erred in the rejection of claims 1 and 10 based on Kimberley et al. in view of Collito or Toch. Accordingly, reversal of the rejection of record with respect to independent claims 1 and 10 is believed proper and respectfully requested.

Claims 4-9, 13 and 15-17

All of claims 4-9, 13 and 15-17 are dependent on either claim 1 or claim 10, and are similarly not obvious based upon Kimberley et al. in view of Collito or Toch. In addition, claims 4-9, 13 and 15-17 recite additional limitations that further add to the distinctness of the claims. Specifically with respect to claims 7 and 16, the references do not disclose a malleable handle. The Examiner asserted in the Final Office Action that the handle of Kimberley et al. would be considered malleable to the degree that the arms of the handle are swingable. This assertion is, however, erroneous, since malleable and swingable are not the same thing. Also, specifically with respect to claims 9 and 17, the air-line tubes 9, 10 in Kimberley et al. are not incorporated into the handle 5. Therefore, the references do not disclose the feature of claims 9 and 17 in which the vacuum line is incorporated into the handle. Thus, the Examiner erred in the rejection of claims 4-9, 13 and 15-17 based on Kimberley et al. in view of Collito or Toch. Accordingly, reversal of the rejection of record with respect to dependent claims 4-9, 13 and 15-17 and is also believed proper and respectfully requested.

**Claims 1, 4-10, 13, 15-17, and 24-31 are patentable under 35 U.S.C. 103(a) over Peternel (US Pat. 3,561,448, hereinafter “Peternel”) in view of Collito or Toch.**

**Claims 1 and 10**

Independent claims 1, 10 and 24 are rejected under 35 U.S.C. 103(a) over Peternel in view of Collito or Toch. With regard to claims 1 and 10, the rejection is legally insufficient. Peternel teaches away from a combination with either Collito or Toch. In particular, the device disclosed in Peternel teaches away from using a ring such as that disclosed in Collito or Toch. There is also no motivation to combine the references. Thus, the Examiner erred in rejecting claims 1 and 10 based upon Peternel in view of either Collito or Toch.

As discussed above, claims 1 and 10 recite a device and a system having the feature of a collar with two halves that together form a cylinder that encircles a blood vessel or conduit. The claims also include the feature of a ring that encircles and attaches the two collar halves.

The Final Office Action states that Peternel discloses all the features of claims 1 and 10 “except for specifically using a ring for encircling the collar halves to hold them together during use.” The Final Office Action further states that it would have been obvious in view of either Collito or Toch to have a collar held together using a ring.

Peternel discloses a clamp assembly for positioning and holding blood vessels to be interconnected (col. 1, lines 1-3). Ends portions of blood vessels are connected while they are held in a cylindrical shape by two cylindrically shaped positioning assemblies 16, 18 having cylindrical sleeves 36, 38 and vacuum manifolds 52 that provide suction to draw the vessels against interior walls 42 of the sleeves 36, 38, and flare the ends 20, 21 of the vessels (col. 1, lines 68-70; col. 2, lines 7-34). The sleeves include first and second semi-cylindrical sections 70, 74 which are pivotally interconnected at one end by a hinge assembly 78 to allow for an open position and a closed position (col. 2, lines 49-59). The open position enables the sections 70, 74 to be positioned on opposite sides of a blood vessel (col. 2, lines 61-62). After being so positioned, sections 70, 74 are moved to the closed position by operating an actuator handle or lever 94 which is pivotally connected

to arm 80 (in FIG. 1) (col. 2, lines 62-67). In the closed position, the sections 70, 74 are brought into sealing engagement (col. 2, lines 67-70).

Peternel teaches away from a combination with Collito. In Collito, again, the ring 48 was used to connect the flanges 30, 32 on the connectors 14, 16 together end-to-end. The ring 48 does not hold two halves of a cylindrical body together, as in claims 1 and 10. Although Peternel does include two positioning assemblies 16, 18 that are located end-to-end, the reference already provides an assembly for holding them in close proximity to allow for suturing of the ends of vessels held therein. Therefore, the ring of Collito, holding two cylinders together end-to-end, is not necessary in Peternel, and there is no motivation to combine the two references. Since Peternel already includes an assembly to perform that function, the reference actually teaches away from including a ring such as that disclosed in Collito. Thus, the Peternel and Collito references cannot alone or in combination form the basis of an assertion that claims 1 and 10 are obvious.

Peternel also teaches away from a combination with Toch. In Toch, again, the clamp 20 is used to hold two semi-cylindrical components together, which has no other means for being held together. In Peternel, on the other hand, the assembly includes an actuator handle or lever 94 which is pivotally connected to arm 80 (in FIG. 1) (col. 2, lines 62-67) that brings sections 70, 74 into sealing engagement (col. 2, lines 67-70). One of ordinary skill in the art would not, therefore, seek to add a clamp such as in Toch to the device described in Peternel, as there would be no need for such a ring. The actuator handle 94 holds the sections 70, 74 in a closed position. When an open position is desired for loading a vessel in the device, such a clamp would be a hindrance, and would destroy the functionality of the assembly. Also, the Toch device is designed to facilitate lymph duct cannulation, and is not designed to bring two ends of a severed vessel together in order to connect the two ends. The Toch device instead surrounds a lymph duct in order to dilate the duct. Therefore, one of ordinary skill in the art would have no motivation to combine the two references together. Thus, the Peternel and Toch references cannot alone or in combination form the basis of an assertion that claims 1 and 10 are obvious.

Therefore, Peternel teaches away from a combination with either Collito or Toch. There is no motivation to combine the references nor an expectation of success when



combining Peternel with a ring or clamp such as that disclosed in Collito or Toch. Such combinations would actually destroy the functionality of the Peternel device. Thus, the Examiner erred in the rejection of claims 1 and 10 based on Peternel in view of Collito or Toch. Accordingly, reversal of the rejection of record with respect to independent claims 1 and 10 is believed proper and respectfully requested.

Claim 24

Independent claim 24 is rejected under 35 U.S.C. 103(a) over Peternel in view of Collito or Toch. The rejection of claim 24 is legally insufficient. The combination of references does not disclose all features of claim 24. In particular, the feature of the claim that is missing from the references is the second collar being separated from the first collar by a first distance. Also, in the Final Office Action, the Examiner stated that Peternel disclosed all of the features of the claim except “a ring for encircling the collar halves to hold them together during use,” and provided that Collito and Toch taught such a ring. The Examiner went on to provide that Peternel could be modified to include a ring from Collito or Toch. However, claim 24 does not include such a ring feature, as in claims 1 and 10. Thus, the Examiner erred in collectively asserting the aspect of a ring feature as related to the rejection of claim 24 based upon Peternel in view of either Collito or Toch.

Claim 24 recites a blood vessel positioning device including a handle with a first collar and a second collar coupled to the handle. The first and second collars are separated by a first distance as the collars are positioned for use to perform a cardiac procedure requiring the holding and positioning of a blood vessel. Both collars are adapted to substantially encircle a blood vessel. The collars also have a number of suction apertures that are adapted to engage and hold the blood vessel.

As discussed above, Peternel discloses a clamp assembly for positioning and holding two blood vessels that are desired to be interconnected (col. 1, lines 1-3). Ends portions of two blood vessels 12, 14 are held in two cylindrically shaped positioning assemblies 16, 18 having cylindrical sleeves 36, 38 and vacuum manifolds 52 that provide suction to draw the vessels against interior walls 42 of the sleeves 36, 38, and flare the ends 20, 21 of the vessels (col. 1, lines 68-70; col. 2, lines 7-34). The sleeves

36, 38 are mounted on two arms 80, 108 (Fig. 1). Once the blood vessels 12, 14 have been engaged in the sleeves 16, 18, the arms 80, 108 are manually grasped and squeezed toward each other against the influence of a spring 116 to pivot the arms 80, 108 about a connection 114 (col. 3, lines 29-33). The ends 20, 22 of the blood vessel 12, 14 are then located in abutting engagement (col. 3, lines 33-35; Fig. 1), which positions the sleeves and blood vessel in the position that is desired for performing a cardiac surgical procedure. Importantly, the sleeves are also in abutting positions (i.e., not spaced apart by any distance).

Peternel, in combination with Collito and Toch, does not disclose the feature in claim 24 of the second collar being separated a first distance from the first collar. Therefore, the combination of references does not render claim 24 obvious, nor does Peternel anticipate the claim. The device of Peternel is configured to hold two separate blood vessels together in order for the two vessels to be interconnected (e.g., sutured together). As a result, the two cylindrical sleeves 36, 38 that hold the two separate vessels 12, 14 are brought together and abut one another, as in Figure 1. The device holds the vessels in the position in which they contact each other and are not spaced apart from one another, so that the two vessels can be interconnected (e.g., sutured).

Claim 24, on the other hand, includes first and second collars that are attached to the same vessel. The two collars do not abut each other, and are separated a first distance from one another. Since Peternel does not disclose or otherwise suggest this feature of claim 24, the reference does not render the claim unpatentable. Also, neither Collito nor Toch remedies the deficiency of Peternel. Accordingly, reversal of the rejection of record with respect to independent claim 24 is believed proper and respectfully requested.

Claims 4-9, 13, 15-17, and 25-31

All of claims 4-9, 13, 15-17 and 25-31 are dependent on either claim 1, claim 10, or claim 24, and are similarly not obvious based upon Peternel in view of Collito or Toch. In addition, claims 4-9, 13, 15-17 and 25-31 recited additional limitations that further add to the distinctness of the claims. Specifically with respect to claims 7, 16 and 26, the references do not disclose a malleable handle. The Examiner asserted in the Final Office Action that the handle of Peternel would be considered malleable because the distance

between arms 80, 108, which he considered to be prongs (as in claim 25) may be changed. This assertion is, however, erroneous, since being malleable and including parts that are adjustable or moveable with respect to one another (such as by changing the distance between the parts) are not the same thing. Accordingly, reversal of the rejection of record with respect to dependent claims 4-9, 13, 15-17, and 25-31 and is also believed proper and respectfully requested.

### **Conclusion**

In view of these remarks, it is respectfully submitted that pending claims 1, 4-10, 13, 15-17 and 24-31 are in condition for allowance. Accordingly, it is respectfully submitted that the rejections of the claims under 35 U.S.C. 103(a) be withdrawn on this appeal.

Respectfully Submitted,

By: 

Kimberly S. Zillig, Reg. No. 46,346

**Customer Number 33072**

Phone: 651-275-9846

Facsimile: 651-351-2954

Dated: October 6, 2008

## **VIII. Claims on Appeal Appendix**

1. A device used to hold and position a blood vessel in the performance of a coronary artery bypass graft procedure, comprising:
  - a handle;
  - a collar coupled to the handle, the collar adapted to substantially encircle a blood vessel, the collar having a number of suction apertures;
  - a vacuum port adapted to be coupled to a vacuum source, the vacuum port communicating a suction to the suction apertures to hold the blood vessel; and
  - wherein the collar is comprised of two collar halves that together form a cylinder;and
  - further comprising a ring for encircling the collar halves to attach the collar halves together.
2. (canceled)
3. (canceled)
4. The device of claim 1, wherein the collar is sized to hold an internal mammary artery.
5. The device of claim 1, wherein the device is sized, shaped and constructed to hold and position a blood vessel that is a graft vessel.
6. The device of claim 1, wherein the collar has a plurality of suction apertures and the suction apertures are circular.
7. The device of claim 1, wherein the handle is malleable.
8. The device of claim 1, further comprising a vacuum line adapted to couple the vacuum port to the vacuum source.

9. The device of claim 8, wherein the vacuum line is incorporated into the handle.
10. A conduit positioning system for use in the performance of a surgical technique on a patient, comprising:
  - a collar adapted to substantially encircle a conduit in the patient, the collar having a number of suction apertures; wherein the collar is comprised of two collar halves that together form a cylinder with a length;
  - a vacuum line coupled to the suction apertures, the vacuum line having a length;
  - a vacuum source coupled to the vacuum line to create a suction at the suction apertures to hold the conduit; and a handle coupled to the attachment head;
  - wherein the length of the cylinder is substantially less than the length of the vacuum line; and
  - further comprising a ring for encircling the collar halves to attach the collar halves together.
11. (canceled)
12. (cancelled)
13. The conduit positioning system of claim 10, wherein the collar is sized and shaped to hold an internal mammary artery.
14. (canceled)
15. The conduit positioning system of claim 10, wherein the collar has a plurality of suction apertures and the suction apertures are circular.
16. The conduit positioning system of claim 10, wherein the handle is malleable.

17. The conduit positioning system of claim 10, wherein the vacuum line is incorporated into the handle.
18. (withdrawn)
19. (withdrawn)
20. (withdrawn)
21. (withdrawn)
22. (withdrawn)
23. (withdrawn)
24. A blood vessel positioning device for use in cardiac surgery, comprising:  
a handle; and a first collar and a second collar coupled to the handle,  
the second collar separated from the first collar by a first distance, each collar adapted to substantially encircle a blood vessel and having a number of suction apertures, wherein the suction apertures are adapted to engage and hold the blood vessel.
25. The blood vessel positioning device of claim 24, wherein the handle comprises a first prong and a second prong, the first prong attached to the first collar and the second prong attached to the second collar.
26. The blood vessel positioning device of claim 25, wherein the first and second prongs are malleable.
27. The blood vessel positioning device of claim 24, wherein the collars are sized to encircle an internal mammary artery.

28. The blood vessel positioning device of claim 24, further comprising a vacuum source coupled to the suction apertures.

29. The blood vessel positioning device of claim 24, further comprising a vacuum line coupling the vacuum source to the first and second collars.

30. The blood vessel positioning device of claim 29, wherein the vacuum line is incorporated into the handle.

31. The blood vessel positioning device of claim 24, wherein each collar has a plurality of suction apertures and the suction apertures are circular.

32. (withdrawn)

33. (withdrawn)

34. (withdrawn)

35. (withdrawn)

36. (withdrawn)

37. (withdrawn)

## **IX. Evidence Appendix**

There is no evidence to be included.



**X. Related Proceedings Appendix**

There are no related appeals or interferences.